DOCUMENT RESUME

ED 112 143 95 CE 004 933

TITLE	Pre Vocational Interdisciplinary Education: Consumer and Homemaking, Industrial Arts, Mathematics. 8th Grade.
INSTITUTION	Devils Lake Public School District 1, N. Dak.; North Dakota State Board for Vocational Education, Bismarck. Research Coordinating Unit.
SPONS AGENCY	Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C. Div. of Vocational and Technical Education.
PUB DATE	[75]
NOTE	65p.; Pages 53 and 55 have been removed because they were copyrighted
EDRS PRICE	MF-$0.76 HC-$3.32 Plus Postage
DESCRIPTORS	Career Education; *Career Exploration; Consumer Education; Curriculum Guides; Grade 8; *Home Economics Education; *Industrial Arts; Interdisciplinary Approach; *Learning Activities; Mathematics Instruction; Prevocational Education; Secondary Education; Unit Plan

ABSTRACT

The guideline presents two 12-week courses involving an interdisciplinary, partly coeducational, prevocational career exploration program in consumer and homemaking and industrial arts at the eighth grade level, and also a supplementary mathematics program. It is designed to give students an opportunity to explore occupations for themselves and to appreciate the occupations of people in both fields. The first part outlines a 12-week course in Home Economics and suggests activities in the following consumer and homemaking areas: food service careers, child care, clothing and consumer education, housing, employability, and self development. Each activity includes: purpose, objective, activities, materials, and evaluation. The 12-week Industrial Arts course is intended to instill in the student an attitude and understanding toward tools, processes, techniques, and organization within the construction cluster. Activities in the following areas are described; safety, draftsman, employee-employer relationships, surveyor, heavy equipment, electrician, plumber, bricklaying and masonry, tools and equipment, and construction. Each suggestion includes purpose, procedure, and activities. The math program is designed to acquaint students with the uses of mathematics in all aspects of life using examples from home economics, construction, and family budgeting. (Author/EC)

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PRE VOCATIONAL

INTERDISCIPLINARY EDUCATION

CONSUMER & HOMEMAKING

INDUSTRIAL ARTS

MATHEMATICS

LIVING IS FOR EVERYONE

Exploratory

LIFE

Program

DEVILS LAKE CENTRAL HIGH SCHOOL

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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8TH GRADE

SEP 11 1975

STATE BOARD FOR VOCATIONAL EDUCATION

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FOREWORD

Helping students make vocational choices which are personally satisfying is one goal of vocational education in North Dakota. It is recognized that, in order to make such choices, the student must have knowledge of his/her own abilities, skills and preferences, and awareness of the work world. Career Development Education helps to provide this background information.

At the junior high school level, Career Development is essentially a time for exploration. An interdisciplinary approach, permitting students to explore a wide variety of career fields, is strongly encouraged.

During the 1974-75 school year, the Devils Lake school system conducted a special project to develop guidelines in interdisciplinary career exploration. The project, funded under Part F (Consumer and Homemaking) of the Vocational Education Amendments of 1968, involved eighth-grade programs in home economics, industrial arts, and math.

The teachers, administrators, and advisory committee members involved in planning and carrying out this project are to be commended for their efforts. It is hoped that this project will provide encouragement for other schools planning interdisciplinary activities, and direction in developing ways of bringing the world of work closer to junior high school students.

Carol E. Burchinal

Carrol E. Burchinal
State Director of Vocational Education

ACKNOWLEDGEMENT

The project staff wish to thank Majore Lovering, State Supervisor of Home Economics, for her planning and support of this project.

We also wish to thank Mr. Christianson and Mr. Nyhus for assisting in the scheduling of the LIFE program. Their support and assistance in developing this project is greatly appreciated.

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INTRODUCTION

The Devils Lake Public School District is presently involved with a Career Development Program. This program is supported by a USOE Exemplary Project through the State Board for Vocational Education.

The program calls for "Career development" in student curriculum from grades K through 14. Also, the development of mini-courses in the shops and laboratories at the junior high level is strongly encouraged.

A special grant was provided through consumer and homemaking funds from the State Board for Vocational Education to develop guidelines in inter-disciplinary pre-vocational career exploration. Through these funds teachers are provided planning time in consumer and homemaking, industrial arts and mathematics for 8th grade students. Also, teaching aids were purchased to assist in the instruction.

This is the first year (1974-1975) for an interdisciplinary course in consumer and homemaking and industrial arts at the eighth grade level. Previously all boys were enrolled in industrial arts and all girls were enrolled in consumer and homemaking. The eighth grade mathematics classes reinforce the math skills necessary for these lab classes.

Career Development Guide for LIFE

8th Grade Exploration Project

Consumer and Homemaking

This guideline to a twelve (12) week course in Career exploration is in Consumer and Homemaking areas of foods and nutrition, clothing selection and care, child care, housing, employability and self-development. The exploration project in Consumer and Homemaking is designed so that both girls and boys will have an opportunity to investigate for themselves and appreciate the occupations of people involved in Home Economics areas.

The importance of worthy home membership as it relates to satisfactory performance in the world of work will be stressed in this course. The development of self-esteem will be a focal point in the study and the activities planned for the curriculum. The Homemaking laboratory and community facilities will be incorporated to present the student with "first hand" occupational experiences. Local people involved in related Home Economics careers will be invited to share their knowledge with the student interviewers and the classroom groups.

The student will be evaluated for evidences of growth through several evaluation tools. Each individual should be allowed to develop his own work values, after becoming fully aware of the alternatives and implications, rather than have them dictated. It is hoped that the students will begin a "work-ladder" pattern that leads to economic success, personal growth and creativity in LIFE.

Career Development Curriculum Guide for LIFE

Consumer and Homemaking Cluster

GOALS

Through the LIFE program in Home Economics we hope to:

1. To direct the student to explore a career choice and become aware of time, money and personalities involved to attain satisfaction with the Career.
2. To acquaint the student with the wide range of careers open to those interested in skills in homemaking.
3. To develop in the student, an awareness of self -- his capabilities and limitations with emphasis on importance of having and planning goals for his life.

Schedule for LIFE

Consumer and Homemaking

WEEK	
One ♀	Inquiry to Life Dual Role Resume' of Responsible Living (Grade 7) Decision-making Self-awareness
Two ♀	Feelings about careers Introduction to lab work Safety organization
Three ♂	Repeat week one
Four ♂	Repeat week two
Five - Group II ♀♂	Nutrition Simple meal preparation Week-end assignment in food observation
Six (1st half) ♀♂	Child care - related jobs on careers Guest speaker
Six (2nd half-Group 1) ♀♂	Start repeating first part of week five activities
Seven ♀♂	Continue repeating second groups activities
Eight ♀	Employability Good Grooming and pleasing employer Time management Field trips for career exploration Communicating

Nine	♀	Introduction to food service careers Consumer education in clothing
Ten	♀	Consumer education in clothing (cont.) Individualized learning
Eleven	♀	Careers in hospitality and recreation Housekeeping Visit motel Machine operation (vacuum, etc.)
Twelve	♀	Project Sharing Present evidence Demonstrations Role Playing Job pictures Evaluation

INTRODUCTORY UNIT

1st Week

Purpose: Student needs to recognize life demands that we play dual roles and the decisions we make will determine the kind of life we will lead.

Objectives: At the completion of this unit, the students should be:

1. Able to help identify a concept of self as a sound basis for making one employable.
2. Acquainted with the importance of having and planning goals for their lives.
3. Able to recognize the dual roles of maintaining a home and earning a wage.
4. Able to begin to explore Career choices and ascertain time, money and personalities involved to attain satisfaction at a Career.

Activities:

1. Each one do a personal coat of arms--Have 5 or 6 personal questions they must answer about themselves.
2. Check list of jobs in maintaining a home--now or in the future. Such as: washing windows, cooking, dusting and who does them in the family.
3. Create a collage of "What I Would Like the World to Know About Me".
4. Design a mask to portray a feeling (happy, crabby, self-pity, etc.) Role play the feeling of each mask.
5. Show filmstrip, "Hung Up or Happy? How Come?"-- from Penney's "Career Decisions".
6. Show filmstrip, "Awareness: Insight Into People." -- from Penney's "Awareness Insight Into People."
7. Checklist of Personal Traits.
8. Dual activity sheet or Bulletin board. Students write down at-home activities and away-from-home activities (School, recreation, etc.)

Evaluation	Select a career for your career project and begin the activities; a 12 week project. Career Project forms are found in Career Education, Devils Lake (Introducing Students to the World of Work from the Employer's Viewpoint.)
Materials:	1. "Career Decisions, Finding and Keeping a Job." JC Penney Co. 2. "Awareness: Insight into People." JC Penney Co. 3. Check list of personal traits. 4. Dual Role Activity Sheet. 5. Check list of jobs in maintaining home.
Evaluation:	Select a career for your career project and begin the activities.

CAREER PROJECT

1. My career project will be _____

2. I want to do this because: _____

_____

_____

3. I want to find out these things about this career:

   a.
   b.
   c.
   d.
   e.

Some things that are possible for me to do:

   a. Shadow a worker
   b. Interview a person in this field
   c. Read some books that relate to my career choice or self-development
   d. Others

4. I plan to do: _____

_____

5. This will be completed by _____

6. My reaction to 2 books in my career choice include title, author, and brief summary.

7. What I have learned about this career choice:

8. Career sharing due last week of class.

   You will need to share your career choice in these ways:

   a. Report booklet. (Include resources including interviews with people.)
   b. Oral presentation. (Talk, demonstration.)
   c. Your expression of how you feel about this career after your research.

CHECK LIST OF PERSONAL TRAITS

TRAIT	Check (✓) yourself in the appropriate column according to how frequently you show the traits.			Give one example of how you have shown each trait.
	Always	Often	Seldom	
Promptness				
Acceptance of Criticism				
Sense of Responsibility				
Dependability				
Friendliness				
Enthusiasm for Learning				
Respect for Others				
Sense of Humor				
Honesty				
Fairness				
Initiative				
Others: (Specify)				

Career Development Curriculum for LIFE: Grade 8

Consumer and Homemaking Cluster

FOODS SERVICE CAREERS

Purpose: To acquaint students with various jobs in food service and emphasize the value of nutrition in job performance.

Objectives: Upon completion of this unit, the students should be able to:

1. Recognize various occupations related to the area of food service and the training required for each.
2. Recognize the importance of food and nutrition and the relationship to functioning on the job.

Activities: To accomplish the objectives the students may engage in activities such as:

1. View a film in food service careers.
2. Visit a quantity cookery kitchen and follow an observation guide.
3. Food Terminology Sheet--terms commonly used on menus; number of jobs available in restaurant because of the type of food ordered. Also go over common menu terms.
4. Select groups by drawing models from 4 food groups.
5. Suppose you are dining out - use menu cards, work in groups and practice taking orders.
6. Using menus, have the students select food for the day. Certain units have set amount of money to work with. Discuss feelings about having only $3.00 or $8.00 for the day to spend. Also compare with the 4 food groups and see if they "Passed Foods" and if money helped any.
7. Using a lab plan, suggest a menu pattern and divide into groups. Plan a meal in detail to prepare the following day and evaluate for learning.
8. Card game--Pop'n Swap from Pillsbury to gain knowledge about nutrition.

9. To introduce measuring we made pop-overs. To carry out the math part, recipe alterations were worked on. Also we discussed metric measure and made ~~the~~ same pop-over recipe metrically.

Materials:

1. Films "Food Service - A Career to Consider"
   National Institute for the Food Service Industry
   120 South Riverside Plaza - 856
   Chicago, Ill. 60606

2. Terminology and Lab Plan forms

3. Observation Guide for field trip

Evaluation:

Observation sheet for Quantity kitchen
Terminology Sheet
Student and Teacher Evaluation of lab to share
Estimate cost per serving (tie in with Math)

OBSERVATION GUIDE

Name of Food Service Business _____

Serving Area

What impressed you most about the equipment?

What did you observe about the traffic pattern?

What did you notice about the food service pattern from storage to table?

Identify 3 safety precautions in work areas.

How did you recognize efficiency in use of time and energy?

How was a cheerful atmosphere created?

In what way did the workers impress you?

Personal grooming?

Mannerisms?

Clothing?

Make one statement on your impressions of the establishment:

Career Development Curriculum for LIFE: Grade 8
Consumer and Homemaking Cluster

CHILD CARE

Purpose: To acquaint students with the job opportunities related to the field of child development.

Objective: Upon competion of this unit the student should:

1. Enhance his self concept as they remembered how they developed.
2. Be more aware of the importance of child's play.
3. Recognize the responsibilities associated with babysitting.

Activities:

1. Discuss how creative and enjoyable a box can be for a toy.
2. Divide into groups and draw non-verbal situations "Today we'll make a silent movie".
3. Divide into small groups; do a group study and report on music, stories, games, & fingerplays.
4. Make a puppet using paperbags and tell stories.
5. Play games children could play in a car.
6. Use overheads for a discussion on the importance of safety.

Material:

1. Cardboard box from store.
2. Assorted paperbags for puppets.
3. Overheads on Safety - 1967 - 3M Company - Home Economics Group.
4. Situations for silent-movie making.
5. World of Work - Job Opportunities in Child Development P. 12 - Career Education in N. D. - Classroom Activities - Home Ec. Division - binder.

Evaluation: Share original puppet stories and evaluate orally.

Silent Movie Situations - Examples

1. Show this example - You are a babysitter and you want to finish reading the chapter but the child (age 3-5) wants you now - you communicate to him you want to finish reading and he is disturbing you.
2. You are babysitting and you want to show the child you like what he did. You do not want to kiss or hug him. Show several ways.
3. Portray your reaction to a child spilling his milk at age 2, 3, 4, or 5.
4. The child, age 5, did a good job setting the table and making his bed. Show praise to the child for this job.

EMPLOYABILITY

Purpose: As a person improves his personal qualifications and acquires skills, his opportunities for employment tend to increase.

Objective: At the completion of this unit, the student should:

1. Become more aware of self and his abilities.
2. Be able to identify attitudes and characteristics which contribute to success in school and employability.

Activities:

1. Have a hand washing session for boys using Lava soap and Corn Huskers lotion.
2. Use a shadow social for posture to show:
   a. what hands say
   b. what do feet tell about the job you do
   c. what does our posture say about us.
3. Invite a beautician or barber to talk about importance of grooming and attitudes for a waitress or waiter.
4. Use grooming check sheet for boys and one for girls.
5. "What Employers Expect" - speaker.
6. Skit - p. 92 - Career Education Classroom activities.
7. Role-play - importance of language in an interview.
8. Want ad activity sheet.
9. Write own want-ad with strong points--why they are qualified for a certain job - such as babysitter.

Materials:

1. Lava soap and Corn Huskers lotion
2. Sheet and spot light for shadow social
3. Dialogue "attitudes"
4. Grooming check sheets

Evaluation: Come to class groomed for the job of your career project.

WANT AD ACTIVITY SHEET

1. Use a North Dakota newspaper and list 10 occupations that are available in the help wanted section.

1. _____	6. _____
2. _____	7. _____
3. _____	8. _____
4. _____	9. _____
5. _____	10. _____

2. Read the ads. List skills, training or experience required by employers. Don't overlook qualifications such as responsibility, ability to work with people, ambition.

1. _____	3. _____
2. _____	4. _____

3. What benefits to the employee (other than salary) are stated?

1. _____	3. _____
2. _____	4. _____

4. How many jobs did you find that you think requires training beyond high school? (Name them.)

_____

_____

_____

_____

5. Suppose you are 16 today and you need money. For which jobs would you qualify? _____

_____

_____

Which job would you choose? _____

_____

Why? _____

_____

PRE-TEST

Check those statements with which you tend to agree in the first column; check those with which you tend to disagree in the second column.

	Tend to Agree	Tend to Disagree
1. Pay is the most important consideration when deciding upon a job.		
2. If an employee gets his required work done ahead of time, he should be able to leave the office early.		
3. Being an "eager beaver" is the way to succeed on a job.		
4. Supervisors have the right to criticize employees about their clothes.		
5. Sales people should be allowed to chew gum if they enjoy it.		
6. It takes careful planning to be punctual.		
7. Wearing metal hairclips to work is considered poor grooming for a girl.		
8. One should attempt to establish close relationships with co-workers early in employment.		
9. It should be permissable to make personal phone calls if work slackens.		
10. A worker's criticism of a superior is harmless, providing it is done in private.		
11. Employees should be able to use business supplies for personal use without feeling guilty.		
12. Employees have the right to talk back to their superiors whenever they feel they have been treated unjustly.		
13. Failure to notify an employer when absent from work is a major offense.		
14. Getting along with people is just as important as the ability to do a job well.		
15. Griping is a harmless way to get rid of unhealthy emotions.		
16. Most jobs are boring.		

(Pre-test Continued)

	Tend to Agree	Tend to Disagree
17. During periods when work slackens, it is wise to "look busy".		
18. Workers should not attempt to do something unless they are specifically told to do so.		

POST-TEST

ON DEVELOPING QUALITIES FOR EMPLOYABILITY

A. Circle the letter representing the best choice for the following items:

1. Employability means:

   a. being able to get a job
   b. being liked by employers
   c. capability of keeping a job
   d. having a social security number

2. One of the qualities which contributes to getting along with people is the capacity to "put yourself in anothers shoes". This is called:

   a. sympathy
   b. tact
   c. empathy
   d. tolerance

3. We communicate to others by:

   a. posture
   b. speech
   c. appearance
   d. all of the above

4. Feelings of inferiority

   a. are always justified
   b. are experienced by everyone
   c. indicate mental illness
   d. none of the above

5. Which has the least effect on a person's chances for getting a job?

   a. aptitude
   b. education
   c. personality
   d. religion

6. What improves one's personal credentials for employment?

   a. acquaintances with a variety of people
   b. recreational interests
   c. travel experiences
   d. all of the above

7. How should we deal with our handicaps?

   a. concentrate on ways to develop strengths
   b. discuss weaknesses often with friends
   c. look for ways to hide handicaps
   d. all of the above

8. How might a person improve his ability to get a job?

   a. change attitudes
   b. develop new talents
   c. expand interests
   d. all of the above

9. Which is true of interests?

   a. they come from experience
   b. they are learned
   c. they may be introduced by a new person

10. Which item does not apply to physical characteristics?

   a. ability to lift heavy weights
   b. bearing and posture
   c. tact in dealing with people
   d. personal appearance

11. Which of the following is the best indication of emotional maturity among teenagers?

   a. cleanliness
   b. leadership
   c. honesty
   d. self-discipline

12. Which is true of interest inventories

   a. they discover jobs in which one will succeed
   b. they give clues to satisfying occupational areas
   c. they measure aptitudes in different fields
   d. they predict performance on certain jobs

13. A person's concept of "success" is:

   a. an indication of his values
   b. determined by his goals in life
   c. influenced by his expectations
   d. all of the above

14. Which of the following might indicate poor mental health?

   a. Joan says she would make a poor seamstress because she is "all thumbs".
   b. David, disappointed with the grade on a test for which he worked hard, shrugged his shoulders and said, "you can't win 'em all."
   c. Bill declares that popularity depends on money and clothes.
   d. Sandra enjoys telling people when they look attractive.

15. What is the best reason for a person to know his or her liabilities as well as assets?

   a. aids in filling out an application form
   b. helps in self improvement
   c. increases popularity
   d. prevents becoming conceited

16. Why is good grooming important?

a. appearance is an indication of one's character
b. appearance is the key to popularity
c. conformity is necessary for success in the world
d. people are judged by appearance

17. What should people do when several others criticize them for wearing too unusual a hair style?

a. be careful what they wear around those people
b. "consider the source"
c. continue to dress as they please
d. analyze their appearance

B. Matching Directions: In the blank before each personal quality, place the letter of the phrase which is the best example of that quality:

Personal Qualities

____1. ability to learn
____2. achievement
____3. attitude
____4. habit
____5. mechanical aptitude
____6. mental health
____7. physical trait

a. accomplishes complicated tasks
b. displays confidence in class discussions
c. easily understands instructions
d. has a knack for fixing
e. is always punctual
f. is enthusiastic about getting a job
g. is liked by classmates
h. shows endurance and stamina

Career Development Curriculum for LIFE: Grade 8
Consumer and Homemaking Cluster

Home Ed. - CLOTHING AND CONSUMER ED.

Purpose: To acquaint students with job opportunities related to clothing.

Objective: At the completion of this unit, the student will:

1. Become aware that the choice and care of clothing influences self and others.
2. Recognize a need for organized thinking and planning to help him perform well.

Activities:

1. Have a guest speaker to explain about buying clothes and to tell about their job in a retail store.
2. As a group, go on a field trip to a fabric shop to have the manager explain what they need to know about fiber, selection, salesmanship and what to look for in clerks.
3. To compare what lines and color can do for the figure and its importance in selling or buying ready to wear.
4. Selecting washing supplies and practice sorting clothes.
5. Demonstration on packing a suitcase.
6. View a film on personal appearance and what we say with clothing.
7. Expose the students to a craft such as knitting, crocheting, creative needle stitchery and have these taught by the senior citizens. A good chance for inter-change of ideas between young and old.

Materials:

1. Various washing supplies
2. "Personal Appearance" - filmstrip from Singer (SVE)
3. "Clothing Communicates" - filmstrip from Penney's
4. Career fashion show from another class (H. Ec. 1)
5. "A Stitch in Time for Men's Lib" - Christian Athlete, June, 1974 - p. 29.

Evaluation:

1. Come dressed as you would for your chosen career and report progress on your special projects/or find pictures of clothes. Teacher first comes dressed for a career.

2. Use a check list - pre test exercise to introduce unit and a check list at the end on developing qualities for employment.

Bulletin Board Suggestions:

"You Never Get a Second Chance to Make a First Impression."

HOUSING

Purpose: To acquaint students with occupational openings to housekeeping aides.

Objective:

1. Students will become aware of physical needs, knowledge and skills required in housekeeping.
2. Students will observe the value of organization and conservation of time and energy.

Activities:

1. Introduce unit with a display of vinegar, soda, newspapers, ammonia and cleaning cloths. "This is all you have to clean house with, and what can you do?" Safety precautions in mixing household cleaning agents, i.e., ammonia and Hilex, or chlorine bleach.
2. Check at home and make a list of all the cleaning supplies, how and/or where they are used and the cost.
3. Compare cost of homeagents and commercial.
4. Invite a vacuum cleaner salesman to demonstrate the cleaning this machine can do.
5. Have a speaker who employs janitors to explain what he looks for in his employees and what they need to know about cleaning.
6. Tour to hospital and motel to observe cleaning person and have a check sheet.
7. Observe a person and do a flow chart on them in a cleaning operation (making bed).
8. Do practical problem solving in relation to being a cleaning lady; stain and spot removing due to accidents of them and animals; what employer would expect of you.

Materials:

1. Soda, vinegar, newspaper, ammonia, cleaning cloths
2. Check sheet for tour to hospital and motel
3. Home assignment - sample flow chart

Evaluation: Write a paragraph about "Pride in a Job Well Done".

OBSERVATION GUIDE - HOUSING

Name of Establishment to observe Housekeeping Aid _____

1. What did you observe about the traffic pattern?

2. How did you recognize efficiency in use of time and energy?

3. What cleaning aids did they use?

4. In what way did the workers impress you?

   a. Personal Grooming?

   b. Mannerisms?

   c. Clothing?

5. Identify areas where sanitation was carefully maintained.

6. How was a pleasing atmosphere achieved through furniture arrangement, lighting, ventilation?

7. Make one statement on your impressions of the establishment.

Example

HOME ASSIGNMENT

Directions:

1. Draw room with Furniture
2. Observe person and draw lines showing the persons traffic pattern.
3. Purpose of Flow Chart
   a. Show how organized a person is - (how many needless trips made)
   b. Show how one can be more efficient
   c. Evaluate the chart on ways for improvement

A traffic chart showing the steps this person took getting out of bed, dressed and making the bed.

Career Development Curriculum Guide for LIFE: Grade 8
Consumer and Homemaking Cluster

Purpose: To see "Career Education as a total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-orientated society, to integrate these values into personal lives in such a way that work becomes possible, meaningful and satisfying to each individual.

Objectives: At the completion of this course, the student should have been directed to:

1. Have reasons to want to work.
2. Know how to obtain work opportunities.
3. Enter the world of work as a successful and productive contributor.
4. Exercise creative abilities.

Activities:

1. Share Career projects - demonstrations, role plays, on the job picutres, booklets with some evidence of accomplishments.
2. Project your future 10 years from now, what you want to be doing and how will you get there.
3. Work pyramids - Give each student a product and trace it through steps of production - example - book - loaf of bread.

Materials:

1. Page 146 - Career Education in the Middle/ Junior High - Evans, Hoyt & Mangum

Evaluation

1. If you were to explain to a 7th grader what this course is like, what would you say?

2. Draw a simple sketch in this square to portray your concept of the world of work.

3. What is your personal attitude about the dual role?

4. As a result of your career project, what is one idea that you have clarified?

5. What special skill do you enjoy? Why?

6. When will you have completed your Career preparation?

Boys ___ Girls ___
Hour _____

THOUGHT ASSESSMENT

DIRECTIONS: Simply mark an X on the line to the right which best describes how you feel about the needs and thoughts listed on the left, as they pertain to you personally in the LIFE Program.

I THINK:	VERY IMPOR-TANT	FAIRLY IMPOR-TANT	MODERATELY IMPORTANT	LESS IMPOR-TANT	LEAST IMPOR-TANT
1. Boys and girls should work together in classroom labs	___	___	___	___	___
2. No one who is important gets his hands dirty	___	___	___	___	___
3. The only reason to get a job is to make money	___	___	___	___	___
4. A job that takes more thinking is more dignified	___	___	___	___	___
5. Some people work because they enjoy it	___	___	___	___	___
6. Everyone should go to college so he can do his job well	___	___	___	___	___
7. All work has dignity	___	___	___	___	___
8. My parents and I should discuss my career interests	___	___	___	___	___
9. Teachers should try to understand students better	___	___	___	___	___
10. I should improve my vocabulary	___	___	___	___	___
11. Boys and girls can do classroom laboratory skills equally well	___	___	___	___	___
12. I should learn to use a sewing machine	___	___	___	___	___
13. I would like to do some volunteer work	___	___	___	___	___
14. Serving others results in one's own happiness	___	___	___	___	___
15. People use math skills throughout their lives	___	___	___	___	___

Academic	9, 10	Vocational	3, 4, 5, 7, 8	Inter Personal	1
Educational	6, 15	Intra Personal	2, 13, 14	Career Development	11, 12

Boys ___ Girls ___
Hour _____

NEEDS ASSESSMENT

DIRECTIONS: Simply mark an X on the line to the right which best describes how you feel about the needs listed on the left, as they pertain to you personally in the LIFE Program.

I NEED:	VERY STRONG NEED	FAIRLY STRONG NEED	MODERATE NEED	FAIRLY WEEK NEED	VERY WEEK
1. To better understant what I read	___	___	___	___	___
2. To make my own decisions	___	___	___	___	___
3. To get some "on the job" experiences	___	___	___	___	___
4. To understand, accept and like myself better	___	___	___	___	___
5. To get help in finding a summer job	___	___	___	___	___
6. To know how to act in a mixed group	___	___	___	___	___
7. To finish school work and tests in the allotted time	___	___	___	___	___
8. To know more about my academic weaknesses	___	___	___	___	___
9. To understand my teachers' vocabulary	___	___	___	___	___
10. To know how my interests relate to my work	___	___	___	___	___
11. To learn how to study better	___	___	___	___	___
12. To set my goals in life	___	___	___	___	___
13. To learn how to use shop tools	___	___	___	___	___
14. To learn how to prepare a simple meal for myself	___	___	___	___	___
15. To learn to tell others how I feel	___	___	___	___	___
16. To better understand adults	___	___	___	___	___
17. To become aware of many career skills needed in homemaking and industry	___	___	___	___	___
18. To recognize my own abilities and limitations	___	___	___	___	___

Academic 1, 7, 9 Vocational 3, 5, 10 Inter Personal 16

Educational 8, 2 Intra Personal 4, 6, 12, 15 Career Development 13, 14, 17, 18

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2. "Awareness: Insight into People" from Awareness Insight Into People
3. "Clothing Communicates"

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1. Meat Cutter #111
2. Waiter-Waitress #165
3. Home Economist #198
4. Cook-Chef #163

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1. Food Service - A Career to Consider

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1. Personal Appearance - Job Survival Skills

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P. O. Box 977, Bismarck, North Dakota 58501

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5 classroom decks $22.50

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Directions 80 - Vol. I - Number II - Turn onto Food P. 16 - Career in Food Area
Vol. I - Number III - Fashionable Careers P. 22
Published by University Communications, Inc. A Division of Cox Broadcasting Corporation, P. O. Box 1234, Rahway, N. J. 07065
Magazine free to high school junior and seniors

Training Kits

Waitress - Self-Training Kit - cost about $20.00
Restaurant - Hotel Aids
Division of Cylox Corporation
2120 Girard Avenue South
Minneapolis, Minnesota 55405

8th Grade LIFE Program

Industrial Arts Construction Cluster

This program is designed so that girls and boys will have an opportunity to explore occupations for themselves and appreciate some of the occupations involved in construction. The course is intended to provide "hands on" experiences that give a student an opportunity to explore these occupations.

It is intended that they will also become aware of the consumers role, the value of a saleable skill, and learn methods of seeking and retaining employment. Through exploration they will learn concepts that are unique to the world of work.

Shop facilities are used to emphasize the related concepts. Community laymen, college students (presently studying specific vocations) and experienced teachers in building and trades serve as resource people. The career education department provides service, coordination, and resource materials.

Work attitudes, career opportunities within the realm of materials and subject matter being taught, the role of construction as to organization, processes, and employees' responsibilities, and the improvement of the students self image are a few results to be realized.

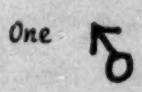
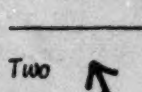
Exploration in the construction cluster is designed around McKnight's World of Construction Materials. Exploration will touch on design, land development, operations, contracting, utilities, fabrication and installation, interior design, landscaping, and salvaging. Home economics covers such units as interior designing. The mathematics department uses activity sheets relating to all units.

It is not the intention of this 8th grade industrial arts project to give specific training in technical skills. However, we hope to instill an attitude and understanding towards tools, processes, techniques, and organization within the construction cluster. Students are evaluated on attitudes evaluation sheet on promptness, cooperation, effort and perserverance, social attitude, reliability, and initiative. This evaluation is conducted by how they see themselves working in the various situations. Also, a fellow student and the instructor will use the same rating sheet as they see a given student's attitude.

Since exploration is emphasized more than skill development, students will not necessarily have a finished product to take home at the end of the 12 weeks.

Schedule for LIFE

Industrial Arts Construction Cluster

WEEK	
One 	Overview of LIFE Group Organization Safety Practices for School, Home, and Work Planning and Design - Draftsman
Two 	Planning and Design - Continued Employer-Employee Relationships Surveying Heavy Equipment - dams, roads, & bridges
Three	Repeat week one
Four	Repeat week two
Five - Group 1	Zoning Building lay out Electrical Plumbing Bricklaying and Masonry
Six (1st half)	Tools and Equipment Take home project
Six (2nd half - Group 2)	Start repeating first part of week five
Seven	Continue repeating first groups activities
Eight-Eleven	Construct small buildings - Example: Storage sheds, fish houses, etc.
Twelve	Review and wrap up activities

LIFE Grade 8
Industrial Arts Construction Cluster

SAFETY

Purpose: Acquaint students with safety practices in the classroom, home and on the job.

Objectives: The instructor will acquaint the students with:

1. Safety requirements and practices needed in the laboratory.
2. The safety features of power tools and equipment in the classroom.
3. Safety garments required for certain jobs. (Students use hard hats when exploring a construction activity.)
4. The laws which govern safety factors related to factory, shop, and construction work. (Example: workman compensation requirements)

LIFE Grade 8
Industrial Arts Construction Cluster

DRAFTSMAN

Purpose: To acquaint the students with the necessity of project planning and the skills of a draftsman.

Procedure: The instructor will:

1. Acquaint the students with the draftsman's tools and their usage.
2. Emphasis the importance of planning any project.
3. Coordinate a visit to a vocational drafting classroom and give the students a chance to try some drawing techniques.

Activities: The students will do the following exercises on 1/4 inch graph paper.

1. Shop sketching exercises.
2. Reproduce a drawing or picture by the graphic reproduction method.
3. Draw a basic floor plan using 1/4 inch = 1 foot scale.

LIFE Grade 8
Industrial Arts Construction Cluster

EMPLOYEE-EMPLOYER RELATIONSHIPS

Purpose: To acquaint students with employer-employee relations.

Procedure: The instructor will:

1. Identify the problems that arise between employers and employees.
2. Identify means that can be applied to settle differences.
3. Discuss why problems do arise and the impact of economics from work stopages.
4. Instill the attitude that getting to class on time and doing good work relates to improved working relations with an employer.
5. Associate the development of proper work attitudes, responsibility, punctuality, pride, and workmanship for the world of work.

Activities: The students will do the following:

1. Role playing activities in the classroom with employee-employer role playing cards.
2. Interview employers to determine what types of working requirements they have for their employees.
3. Identify the promotional opportunities within various types of employment and the fringe benefits that exist.
4. Determine wages, (tradesman income vs. professional income) list different types of deductions, and seniority benefits.

LIFE Grade 8
Industrial Arts Instruction Cluster

SURVEYOR

Purpose: Acquaint the students with the skills and role of a surveyor.

Procedure: The students will:

1. Read a plot plan.
2. Locate property lines, existing structures, water and telephone lines and streets in site boxes.
3. Locate property lines with a building line and direction circle on gym floor or playground.
4. Shoot a grade with a leveling rod and a builder's transit.
5. Identify tools used by a surveyor.

LIFE Grade 8
Industrial Arts Construction Cluster

HEAVY EQUIPMENT (Dam, road and bridge construction)

Purpose: Acquaint students with occupations in dam, road and bridge construction.

Procedure: The students will:

1. View the World of Construction filmstrip.
2. Play the "Big Builder Game"
3. Identify the major occupations involved in these types of construction.
4. Identify the major types of dams, roads, and bridges.
5. Discuss contracting, sub contracting, and different types of contracts.
6. Sizes and kinds of materials.
7. Discuss labor, equipment and overhead costs.
8. Identify how excavating, transferring, and disposing relate to these types of construction.

LIFE Grade 8
Industrial Arts Construction Cluster

ELECTRICIAN

Purpose: To acquaint students with the skills of an electrician.

Procedure: The instructor will discuss the following with the students:

1. Causes of electrical accidents.
2. Electrical symbols and plans.
3. The training programs and apprenticeships required of an electrician.

Activities: The students will do the following:

1. Assemble an electrical extension cord.
2. Assemble wire and switch to an electric motor. (Can use an old washing machine motor.)
3. Assemble an electric circuit and trouble shoot if necessary.
4. Calculate estimates for an electrical project.

LIFE Grade 8
Industrial Arts Construction Cluster

PLUMBER

Purpose: To acquaint students with some of the skills of a plumber.

Procedure: The instructor will share the following information with the students:

1. The tools of the plumbing trade and how they are used.
2. A plumbing plan for a new home.
3. Various materials used in plumbing jobs.
4. The skill, proficiency, and knack required of a plumber.
5. The training and apprenticeship programs for a plumber.

Activities: The students will perform the following activities:

1. Cut plastic pipe and assemble joints (without cement) in a mini wall detail.
2. Cut copper pipe and sweat solder copper joints in a mini wall detail.
3. Fasten plastic pipe to a copper connector.
4. Calculate estimates for materials and labor on a given plumbing job.

LIFE Grade 8
Industrial Arts Construction Cluster

BRICKLAYING AND MASONRY

Purpose: To acquaint students with the skills of a bricklayer and mason.

Procedure: The instructor will lead class room discussion on:

1. A bricklayer and mason's skill, dexterity, and mastership of his craft.
2. The various masonry tools used in these trades.

Activities: The students will do the following activities:

1. Proportion and mix mortar with the use of sand and lime.
2. Perform a slump test on the mortar mixture.
3. Lay a concrete block detail (girls may prefer to lay brick).
4. Through provided information and factors apply their math skills to calculate estimates masonry materials and labor.

LIFE Grade 8
Industrial Arts Construction Cluster

TAKE HOME PROJECT - TOOLS AND EQUIPMENT

Purpose: To acquaint students with the use and care of selected tools to construct a take home project. (Encourage a project that will require as many types of tools as time permits.)

Procedure: The students will:

1. Select and design a small take home project. (Example - one twelve week period students designed a Tic Tac Toe Board with golf tees for pegs.)
2. Compute the cost of materials for the project and review alternative materials to use.
3. Determine the various tools that will be needed for their project.
4. Observe the instructions for proper use of the tools.
5. Establish a method for producing the project as quickly as possible.
6. Assemble the project.

LIFE Grade 8
Industrial Arts Construction Cluster

CONSTRUCTION PROJECT

Purpose: To allow students to construct a finished construction product. (Example - lawn shed or fish house.)

Activities: The students will:

1. Investigate zoning regulations.
2. Sketch a basic plan of the building.
3. Modify plan and make materials list.
4. Compute the costs of alternative materials, prepare a cost estimate and order materials.
5. Lay out project materials and assemble.
6. Apply finishing touches.
7. Assist in delivery of building, if possible, to person purchasing the structure.

LIFE Grade 8
Industrial Arts Construction Cluster

WRAP-UP

Activities:

1. Review materials and processes used during 12 weeks.
2. Discuss the "hands on" activities as they relate to the World of Work.
3. Salvage materials for future use.
4. Clean and organize lab.
5. Inventory tools and equipment.
6. Evaluate project and student participation.

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8th Grade LIFE Program

Mathematics

In the involvement of the LIFE Program, the 8th grade math students rarely used the traditional textbook. Rather, they were given activity sheets which related to various occupations or everyday problems one may encounter. An effort was made to create an awareness of how basic math skills are applied to everyday living.

As in all human learning, communication between the teacher and the student is an important factor. If the instructor can keep an open line of communication with the student, each math activity can be a broad exploration of some facit of life. Self-realization remains an important factor.

The examples of math activities shown in this guide line are taken from the math activities section of Career Education Classroom Activities published by the Vocational and Public Education Departments of Instruction in North Dakota.

State Board for Vocational Education
900 East Boulevard
Bismarck, North Dakota 58501

Activities have also been used from Career Related Math Units by the Robinsdale Public School.

Independent School District 281
4148 Winnetka Avenue North
Minneapolis, Minnesota 55427

LIFE Grade 8
Mathematics (Example Activity)

Purpose: To acquaint the student with a use for Mathematics in Home Economics.

Activity: Have the students figure out the amount of material needed, pleats and space between pleats, for the windows in your classroom.

Procedure:

1. Have a home economist or your Home Economics teacher come in and talk on draperies.
2. Discuss the activities materials.
3. Have the class determine where the pleats should be, number of pleats, space between pleats, and amount of material needed to cover the windows in your classroom.

HOW TO FIGURE OUT AMOUNT OF MATERIAL YOU NEED FOR DRAPES TAKING PLEATS INTO CONSIDERATION

The most important thing to remember is to measure for your rods first and mount them before measuring for draperies.

WIDTH - For side draperies, measure the space you want the drapery to cover, and allow twice the width for each panel.

For draw draperies, the fabrics should be 2 - 2 1/2 times the width, of the fixture plus 2 1/2" for each panel for overlap plus 2 1/2" for return on each side. Add 1 1/2 - 2" for hem. Formula = 2-2 1/2 times the width plus 2 1/2" for overlap plus 2 1/2" for return and 1 1/2 - 2" for hem.

LENGTH - Amount needed for one panel is the length from the rod to the sill, apron or floor plus an allowance for bottom hem, leading and shrinkage.

Hem 4 to 6 inches (unlined draperies; a double hem is more desirable)

Topheading - 3 1/2 - 4 1/2 inches

Shrinkage - check label, maximum shrinkage is shown in percentage. 1% allow 1/2 inch per yard; 2% allow 3/4 inch per yard.

FIGURING PLEAT ALLOWANCE First pleats are most often made in uneven numbers (3, 5, 7, etc.) numbers of pleats depends upon the amount of fullness to be taken up in order to fit rod. Determine the space to be covered in the rod, plus any overlap and the distance around the end. (return) (remember each side of drapery covers half the length of the rod). Subtract this from width of the hemmed drapery piece. This will give you amount of material to be taken up in pleats. Formula = d - (1/2 rL + rr + 0) = Amount to be taken up in pleats rL - rod length, rr - rod return, 0 - overlap, d - width of hemmed drapery piece.

EXAMPLE: 1/2 rod length - 15", rod return - 3", overlap - 2", width of drapery piece - 45", d -(rl + rr +o) = Amount; 45" -(15" +3" + 2") = amount 45" - 20" = Amount 25" = Amount for pleats. If five pleats are desired, pleats may take 3 1/3" - 5" of fabric, depending on weight of material.

Figuring space between pleats

1. Space between pleats should be slightly narrower, than pleats themselves.
2. The distance from wall to first pleat, plus the overlap; subtract this from the desired total width of the finished drapery.

   Formula = fd - (rr + o) = space

   fd - finished pleated drapery, rr - rod return, o - overlap

EXAMPLE - Rod return - 3" overlap - 2" finished pleated drapery - 20" 20" - (3" + 2") = space, 20" - 5" = space, 15" = space

Note: the number of spaces is always one less than the number of pleats being used. (Example: 5 pleats - 4 spaces; 10 pleats - 9 spaces, etc.) In this case we have 5 pleats so we will have 4 spaces. So we divide 4 into 15" to get the amount of the space. 3 3/4" between pleats.

LIFE Grade 8
Mathematics (Example Activity)

Purpose: To show students that all jobs require knowledge in mathematics.

Activity: Through individual investigation, students will become acquainted with the practicality of everyday mathematics and its application to the world of work.

Procedure:

1. Give students an example of one job that requires a basic knowledge of math.
2. Have students pick five more occupations (example: service station operator, auto mechanic, nurse, doctor, etc.) and let them explain how each uses mathematics in their everyday work.
3. Discuss the results.

STUDENT EXAMPLE

1. Clerk — Sales Slip

1.45	pro
1.28	meat
.45	groc
.69	groc
.75	groc
$4.62	
.16	tax
4.78	total
10.00	amount
5.22	change

2. To Surveyor - House and Yard Lot

A=bh	A=bh	A=bh	A=Total Sq. Ft.
A=(155) (66)	A=(10) (12)	A=(12) (35)	A=10,230 - 540
A=10,230 sq. ft.	A=120 sq. ft.	A=420	A=9,690 sq. ft.

3. Chevrolet Garage — Service Slip

Muffler	4.98
Rocker arm	9.99
(2) brake shoes	10.85
Wheel alinement	55.76
Labor	19.95
101.44	total

4. Painter - Wall, Paint, Plans

A=bh	A=bh	
A=(50) (178)	A=(8) (10)	
A=8,900 sq. ft.	A=80	
A=1/2bh	A=8,900-100	Total area to be painted
A=1/2 (4x10)	A=8,800 sq. ft.	is 8,800 square feet
A=20 sq. ft.		

5. Nurse — Medicine Chart

.23	cc pen.
.10	cc mor.
.33	cc total

6. Payroll Accountant

H. Wor.	H. W.	S.S.	S.T.	Dep	Check record
40	$7.50	$22.91	$27.35	4	Salary
					$300.00
				$7.00 each	-40.26
					-28.00
					$231.74 Total

LIFE Grade 8
Mathematics (Example Activity)

Purpose: To create an awareness of how geometry is used in construction occupations.

Activity:

1. Have students write a paragraph describing the work of five to ten math related occupations.
2. Construct a bulletin board depicting the titles of some of the occupations in the reports and add pictures showing their work.

Procedure:

1. Introduce geometry as a course that has numerous implications to nearly any occupations the student may want to pursue.
2. Kickoff can come from textbook that includes any reference to work.
3. On a bulletin board, illustrate with pictures such things as designs, bridges, maps, buildings, blue prints, and artistic pictures based on geometric shapes.
4. Have students make geometric designs:
   - Straight line designs - pencil, string
   - Polyhedron models, etc.

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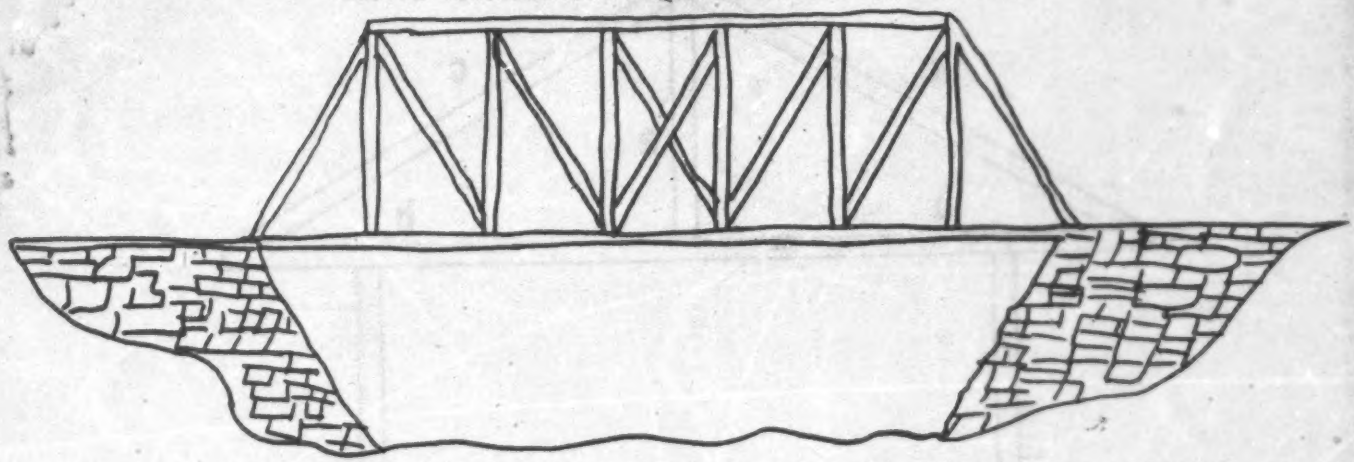
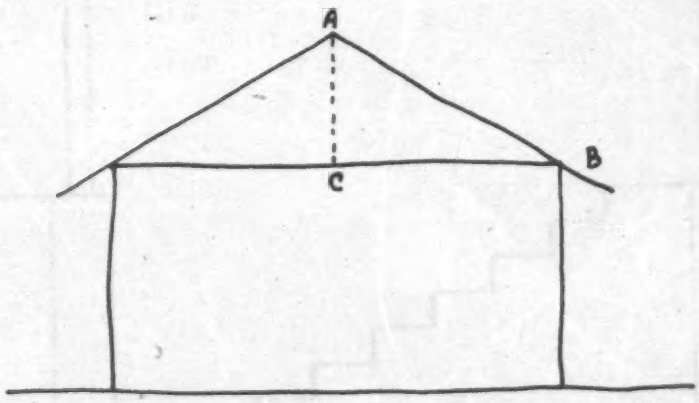
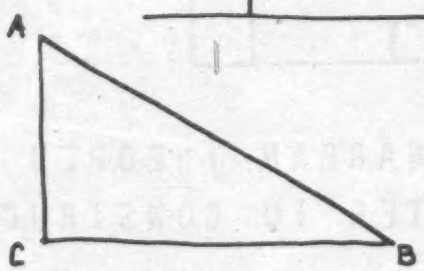
GEOMETRIC DESIGN IN CONSTRUCTION

BRIDGE CONSTRUCTION REQUIRES THE USE OF GEOMETRY



The strength and rigidity of truss construction depends upon triangles.





The piece AB of a roof is called a rafter. How long must AB be made when AC is 6 ft. and BC is 12 ft.?

$C^2 = A^2 + B^2$

A CARPENTER APPLIES MATHEMATICS DAILY

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LIFE Grade 8
Mathematics (Example Activity)

Purpose: To acquaint students with various aspects of balancing a family budget.

Activity: Given a set amount of money and list of necessary expenditures, students will be given the opportunity to balance a budget. This will give them an indication of where their money goes.

Given the various items of the family budget, a circle graph will be developed.

Procedure:

1. Show filmstrip "Budgeting Your Money" (Eye Gate 75E).
2. Distribute the "Family Budget" worksheet to each student.
3. Briefly discuss the deductions pointing out the difference between "gross" pay and "net" pay.
4. Have students divide the money into the various categories as they would budget it.
5. Discuss the results by listing the high and low estimates in each category.
6. The differences should point out the wide variety of individual preferences as to where money is spent.

"FAMILY BUDGET"

Family of Four (Wife, Husband, Two Children)

GROSS MONTHLY SALARY		$700.00
Social Security	$34.75	
Federal Income Tax	77.39	
State Income Tax	6.15	
Hospital Insurance	44.65	
Retirement	21.75	
	$184.69	
NET TAKE HOME PAY:		$515.31

HOW MUCH WOULD YOU ALLOW FOR EACH ITEM IN THE FAMILY BUDGET: ($515.31)

SHELTER:_____ House payment, water bill, heat and lights, telephone, house tax, fire insurance.

FOOD: _____Groceries (keep in mind family of four.)

AUTOMOBILE: _____Gasoline, tires, repair, insurance, money needed to buy new car, and periodic service for car.

RECREATION:_____Movies, athletic events, vaction for summer months, boats, campers, boat motors, and repair of all items.

CLOTHING:_____Four members in family

CONTRIBUTIONS:_____Community fund, church contributions, etc.

SAVINGS:_____For the rainy day.

REPAIR & IMPROVEMENT:_____Paint house, purchase new lawn mower fix windows, buy garden equipment, buying new furniture for the house.

INSURANCE:_____Life (husband and wife), income protection.

MISCELLANEOUS:_____Dental and eye care, (special events like taking family for Sunday dinner)

TOTAL: $515.31

SUMMARY

Before the LIFE Program (Living is For Everyone) was developed in the Devils Lake Public Schools, the standard procedure was to:

1. Offer 8th grade industrial arts and home economics two days a week for a full year.
2. Boys went to industrial arts and girls to home economics.
3. Teachers "did their thing" - everyone went their own way.

With the adoption of the LIFE Program teachers worked together and planned teaching units. Teachers from home economics, industrial arts and math worked together to develop the LIFE Program.

The following changes came about:

1. Industrial arts and home economics students meet everyday for a 12 week period.
2. All boys and girls registered in the LIFE Program participate in industrial arts and home economics activities for three and one half weeks each. The remaining five weeks are spent in the traditional setting.
3. Industrial arts, home economics and math teachers meet periodically to evaluate progress and keep up to date on units and materials that each department was using.

Because of the newness of this idea, the first twelve week period was awkward for the students. At the start of the second and third twelve week periods, students showed an anxiety to get to the other department and try some things. This was attributed to the selling power of the students who had been through the project.

The Devils Lake teachers chose to relate to the construction and consumer and homemaking occupational clusters for this project. However, exploration into other clusters could also be incorporated into a program such as this.

Students will continue to see the relationship of school subjects as long as their teachers keep an open line of communication between themselves and share materials and activities.